Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Previously Presented) A method for providing feedback from a mobile station to a base station based on predicted information, the method comprising:

performing propagation measurements for a plurality of propagation media;

estimating a representative value for each of the at least two of the plurality of propagation media based on the propagation measurements from at least two antennas;

performing prediction of future propagation measurements for each of the plurality of propagation media; and

generating the feedback information based on prediction of future propagation measurements.

6. (Original) The method of claim 5, further comprising conveying the feedback information to the base station using a feedback channel.

7. (Currently Amended) A method for supporting signal transmission, the method comprising:

receiving a first pilot signal transmitted over one of a plurality of distinct channels;

receiving a second pilot signal transmitted over another one of the distinct ~~channel~~ channels, wherein the first pilot signal and the second pilot signal are identical;

determining weights, corresponding to the channels transporting the pilot signals, based on the received first pilot signal and the received second pilot signal; and

sending feedback information based on the determined weights to the base station.

8. (Original) The method of claim 7, further comprising:

receiving a modulated carrier signal; and

demodulating the carrier signal to recover a data stream.

9. (Original) The method of claim 7, further comprising:

modulating a data stream for transmission back to the base station.

10. (Original) The method of claim 7, further comprising:

quantizing the weights as the feedback information.

11. (Original) The method of claim 7, wherein the weights are determined every Power Control Group (PCG).

12. (Original) The method of claim 7, wherein the weights are distinct for each channel.

13. (Original) The method of claim 7, wherein the feedback information is transmitted back to the base station via a feedback channel.

14. (Original) An apparatus for supporting signal transmission, the apparatus comprising:

an antenna configured to receive a first pilot signal transmitted over one of a plurality of distinct channels, and a second pilot signal transmitted over another one of the distinct channel, wherein the first pilot signal and the second pilot signal are identical; and

a feedback unit configured to determine weights, corresponding to the channels transporting the pilot signals, based on the received first pilot signal and the received second pilot signal, wherein the feedback unit generates feedback information based on the determined weights for transmission to the base station.

15. (Original) The apparatus of claim 14, further comprising:

a demodulation unit configured to demodulate a carrier signal to recover a data stream.

16. (Original) The apparatus of claim 14, further comprising:

a modulation unit configured to modulate a data stream for transmission back to the base station.

17. (Original) The apparatus of claim 14, wherein the feedback unit is further configured to quantize the weights as the feedback information.

18. (Original) The apparatus of claim 14, wherein the weights are determined every Power Control Group (PCG).

19. (Original) The apparatus of claim 14, wherein the weights are distinct for each channel.

20. (Original) The apparatus of claim 14, wherein the feedback information is transmitted back to the base station via a feedback channel.

21. (Original) A method for supporting signal transmission, the method comprising:

transmitting a first pilot signal over one of a plurality of distinct channels to a mobile station;

transmitting a second pilot signal over another one of the distinct channels, wherein the first pilot signal and the second pilot signal are identical prior to transmission; and

receiving feedback information, in response to the transmitted pilot signals, from the mobile station, wherein the mobile station determines weights corresponding to the channels transporting the pilot signals based on the transmitted first pilot signal and the transmitted second pilot signal.

22. (Original) The method of claim 21, wherein the weights in the feedback information are utilized to assign antenna weights.

23. (Original) The method of claim 21, wherein the feedback information is received via a feedback channel.

24. (Original) An apparatus for supporting signal transmission, the apparatus comprising:

a first antenna configured to transmit a first pilot signal over one of a plurality of distinct channels to a mobile station;

a second antenna configured to transmit a second pilot signal over another one of the distinct channels, wherein the first pilot signal and the second pilot signal are identical prior to transmission; and

a processor unit configured to receive feedback information, in response to the transmitted pilot signals, from the mobile station, wherein the mobile station determines weights corresponding to the channels transporting the pilot signals based on the transmitted first pilot signal and the transmitted second pilot signal.

25. (Original) The apparatus of claim 24, wherein the weights in the feedback information are utilized to assign antenna weights for the first antenna and the second antenna.

26. (Original) The apparatus of claim 24, wherein the feedback information is received via a feedback channel.

27. (Original) An apparatus for supporting channel prediction, the apparatus comprising:

means for determining weighting values associated with a first signal and a second signal received from a base station based on a difference of the received signals, wherein the first signal and the second signal are transmitted respectively over spatially separate antennas of the base station;

means for quantizing the weighting values; and

means for generating a feedback command based on the quantized weighting values.

28. (Original) The apparatus of claim 27, wherein the weighting values are determined at periodic intervals from information obtained from the first signal and the second signal.